BS 200/2

A

DESCRIPTION

OF THE

MACHINE

FOR THE

FIREWORKS,

With all its ORNAMENTS,

AND

A Detail of the MANNER in which they are to be exhibited in St. JAMES's PARK, *Thurſday, April* 27, 1749, on account of the

GENERAL PEACE,

Signed at *Aix La Chapelle, October* 7, 1748.



Publiſhed by Order of his MAJESTY's Board of Ordnance.

LONDON,
Printed by W. BOWYER,
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MDCCXLIX.
[Price SIX PENCE.]

Tower, April 21, 1749.

THE Publick is desired to take Notice, that Messr. *Gaetano Ruggieri* and *Joseph Sarti*, only, are authorized by his Grace the Master General, the Lieutenant General, and Principal Officers of his Majesty's Ordnance, to publish the *Description of the* intended *Fireworks*.

By Order of the Board,

CHARLES BUSH.

By Virtue of the preceding Order, we have appointed *William Bowyer* to print the said *Description of the Fireworks*, and him only: And whosoever else shall presume to print or abridge the same, shall be prosecuted according to Law.

GAETANO RUGGIERI,
GIOSEPPE SARTI.

A DESCRIPTION OF THE MACHINE for the FIREWORKS, &c.

THE MACHINE is ſituated 500 Feet from his MAJESTY's Library, and repreſents a magnificent *Doric* Temple, from which extend two Wings terminated by Pavillons, as may particularly be ſeen by an accurate Plan and Elevation, publiſhed by the Conſent of his Grace the Maſter General and the Right Honourable and Honourable the Principal Officers of his Majeſty's Ordnance.

This Machine is 114 Feet high to the Top of his MAJESTY's Arms, and is 410 Feet long. It was invented and deſigned by the Chevalier *Servandoni*, and all the Framing was performed by Mr. *James Morris*, Maſter Carpenter to the Office of Ordnance:

The ORNAMENTS of this Machine are all in Relief, and it is adorned with Frets, Gilding, Luſtres, Artificial Flowers, Inſcriptions, Statues, Allegorical Pictures, &c.

The INSCRIPTIONS are as follows:

On the Pedeſtal of PEACE in the Center,

PAX. REDIVIVA.
AN. MDCCXLVIII.
Peace Reſtored in the Year 1748.

In the Frieze over the Center Arch,

GEORGIVS: II: REX.

which appears tranſparent during the whole Performance of the Firework.

On the Right Side of the Machine,

REDINTEGRATA.
EVROPAE. PACE.
SECVRITATE. FOEDERVM.
STABILITA.
COMMERCIO.
FELICITER. RESTITVTO.
SVB. AVSPICIIS. OPT. PRINC.
LAETATVR.
S. P. Q. B.

The Reſtoration of Peace to Europe, *the Security of the Faith of Treaties, the happy Re-eſtabliſhment of Commerce under the Auſpices of the beſt of Kings, is the Joy of the* Britiſh *Senate and People.*

On the Left-ſide of the Machine,

HINC.
PRINCIPEM.
BELLO. ACCINGIT.
LIBERTATI. DEVOTA.
FORTITVDO.
ILLINC.
PACIFICVM. OSTENDIT.
SALVTI. OMNIVM.
CONSVLENS.
CLEMENTIA.

On one Hand Valour ſacred to Liberty prepares the Prince for War. On the other, Clemency conſulting the common Good ſhews him ſtudious of Peace.

On the Attick in the Middle of the back Front,

GEORGIO. II. REGI. OPT.
AVCTORI. SALVTIS.
LIBERTATIS. VINDICI.
FVNDATORI. QVIETIS.
PATRI. PATRIAE.

To the Guardian of our Safety, the Aſſertor of our Liberty, the Eſtabliſher of our Tranquillity, the Father of his People, George *the Second.*

The STATUES which adorn it are in Number twenty-three, *viz.*

On the firſt Half-pace of the great Stair-caſe on the Right-hand is the Figure of FAME; on the Left ISIS, each reclining on an Urn.

In the Center of the Temple, ſeated on an Altar, is the

GODDESS of PEACE,

holding an Olive-branch, and ſupported on the Right by NEPTUNE, on the Left by MARS.

Theſe five are caſt in Plaiſter of *Paris.*

In the Front are four Statues, *viz.*

IVSTITIA. FORTITVDO.
TEMPERANTIA. PRVDENTIA.

On the Right-end,

RELIGIO. CONSTANTIA.

On the Left-end,

HONOR. CLEMENTIA.

In the Back-front,

FIDES. VIGILANTIA.

On the Attick above the Cornice in the Front,

IVPITER. CERES. DIANA. APOLLO.

In the Back-front, at the Angles, are,

MERCVRIVS. MINERVA.

Theſe Statues were all deſigned by Chevalier *Andrea Caſſali.*

The PICTURES in the Front of the Machine are eighteen, each painted double: They at firſt appear as Marble Baſſo Relievos, and after the Firework is played off they are removed by Machinery, and diſcover Pictures repreſenting the ſame Subject in Colours, which are rendered tranſparent by a great Number of Lampions.

The great Picture over the Cornice in the Center of the Machine is twenty-eight Feet by ten. It repreſents

His MAJESTY giving PEACE to BRITANNIA.

The Attendants on PEACE, are *Plenty*, *Riches*, *Felicity*, *Trade*, and *Commerce*. The Attendants on BRITANNIA are *Liberty*, *Agriculture*, and the *Arts* and *Sciences*.

On the Right of this, below the Entablature, is a Picture of fifteen Feet by eight, repreſenting the Return

of NEPTUNE: He is riding on the *Ocean* in a Carr drawn by *Sea-horſes:* His Right-hand holds a Trident, and his Left ſupports a Globe: He is conducted by the *Genius* of PEACE, and attended by *Tritons*, *Sea-Nymphs*, &c. Companion to this on the Left of the central Arch, is the Return of MARS: He is ſeated on a Carr drawn by three Lions, the Arms of *England*, and is conducted by FAME, with an Olive-branch, who proclaims the *Peace*. The Carr is followed by the *Army*.

Theſe three were deſigned by Chevalier *Andrea Caſſali*.

On each Side of theſe two laſt Pictures is a Feſtoon of Arms and Military Inſtruments.

Theſe with his MAJESTY's Arms at Top, with the Trophies on each Side, and the Star of St. *George* and Star of St. *Andrew*, are the Performance of Monſieur *Cleremont*.

The Medaillon on the Right-hand is BRITANNIA joining Hands with FRANCE: The Legend,

CONCORDIA. REDVX.

Exergue, BRIT. GALL.

Concord Renewed. Britain, France.

Below this is the Figure of *Liberty*. LIBERTAS.

On the Left is a Medaillon repreſenting BRITANNIA joining Hand with SPAIN: the Legend,

SALVS. MVTVA.

Exergue, BRIT. HISP.

Mutual Benefit. Britain, Spain.

Below

Below this is the Figure of *Plenty*. COPIA.

Theſe with the two *Genii* on each Side the central Arch are deſigned by Signor *Soldi*.

The following PICTURES are not rendered tranſparent, *viz.*

The *Genii* of PEACE burning Heaps of Arms on each End of the Machine,

Which with the Medaillons, and painted Feſtoons within, are by Signor *Soldi*.

The Trophies of Arms at Top of the Back-front, by Monſieur *Cleremont*.

DISPOSITION of the FIREWORK.

After a grand Overture of Warlike Inſtruments, compoſed by Mr. *Handel*, a Signal is given for the Commencement of the Firework, which opens by a *Royal Salute* of 101 Braſs Ordnance of the following Natures, *viz.*

6 Pounders - -	71
12 Pounders - -	20
24 Pounders - -	10

The *Salute* ended, the *Firework* begins to diſplay itſelf as follows:

I.

120 Large Honorary Rockets.

96 Rockets in two Flights.

12 Mortars

12 Mortars with Air Ballons.
12 Caduceus Rockets.
12 Girandole Rockets.

These fire together:

Two regulated Pieces, each consisting of Four Mutations, *viz.*

I. A large fixed Sun.
II. A Star of six Points, and between each Point a Ray.
III. A Star of ten Points.
IV. A compound Figure consisting of Points and Rays.

Four large double Wheels moved by four Fires.

Twenty Tourbillons.

II.

120 Large Honorary Rockets.
96 Rockets in two Flights.
14 Mortars with Air Ballons.
12 Caduceus Rockets.
12 Girandole Rockets.

These fire together:

Two regulated Pieces consisting of vertical Motions communicating to fixed Fires, each having Four Mutations, *&c.*

I. A vertical Sun, which communicates to
II. A fixed Star of six Points, with six lucid Stars at the interior Points of the great Star.

III. A large vertical Sun moved by double Fires, which communicates to
IV. A beautiful Figure compoſed of a great Number of brillant Stars.
Four large double Wheels moved by four Fires.
Twenty Tourbillons.

III.

120 Large Honorary Rockets.
192 Rockets in four Flights.
4 Mortars with Air Ballons.
12 Mortars with Air Ballons illuminated.
12 Caduceus Rockets.
12 Girandole Rockets.

Theſe fire together:

Two regulated Pieces, each conſiſting of a large brillant Wheel, whoſe Center is compoſed of a ſteddy white Fire; from whence proceed ſix *Archimedean* Screws, that form as many Cones.—Above theſe are ten Wheels of *Frueli*, that turn vertically and horizontally, ſo as to form one vaſt Globe of Fire, on the Area of which are ſeveral ſmall Globes of a very white Fire.
Four large quadruple Wheels moved by eight Fires.
Twenty-four Tourbillons.

IV.

120 Large Honorary Rockets.
96 Rockets in two Flights.
400 Rockets in two Flights.

18 Mor-

18 Mortars with Air Ballons illuminated.
12 Caduceus Rockets.
12 Girandole Rockets.

To be fired together, Three regulated Pieces:

That in the Center is a Machine, from whence the Fire iſſues out, and retires within, twelve Times alternately. When without, it forms a Glory: when within, it compoſes a Star of eight Points, and then changes to a Royal brillant Wheel, whoſe Fire is thirty Feet in Diameter, and is moved by twelve Fires.

On each Side of this, is a Caſcade of twenty-four Feet high, of three Mutations each, *viz.*

I. Four Falls of Fire of eight Feet each.
II. A magnificent *Jet de feu* of forty Feet high.
III. A Pyramid of thirty Feet high, compoſed of Wheels with bright Planes in their Center, which terminate by projecting an hundred illuminated Globes from as many Pots de Brins.

1 Mortar of nine Cylinders with one large Air Ballon in each.
600 Rockets in two Flights.

V.

141 Large Fountains, which form all the Outlines of the Machines, and play thirty Feet high; at the ſame Time the Vaſes on the Pavillons appear in Fire.

400 Pots de Brins.
192 Rockets in four Flights.

VI.

68 Pyramids of brillant Fire, ſupporting fixed Suns of a red Fire, placed on the principal Lines of the Machine.
800 Pots de Brins.
192 Rockets in four Flights.

VII.

130 Pots d'Aigrettes with
260 Gerbes, which fire together and form ſemicircular Arcades with Jets riſing between. Theſe extend along the principal Lines of the Machine, and terminate with
130 Exploſions of Serpents, Rains, and Stars.
1200 Pots de Brins.
1 Mortar of nine Cylinders, with one large Air Ballon out of each.
288 Rockets in ſix Flights.

VIII.

24 Figured Pieces on the Terraces and Top of the Machine, *viz.*
10 Stars of eight Points, with a fixed Sun with curved Rays behind it. Theſe fire together, and afterwards communicate to
10 Double Wheels.
4 Pieces of a complicated form, conſiſting of diagonal Wheels, and vertical Globes.

2 Large

2 Large quadruple Wheels moved by ſix Fires each.
4 Large double Wheels moved by four Fires, with Planes of bright Fire in their Center.
4 Single Wheels moved by one Fire, with bright Planes as before.
1600 Pots de Brins.
384 Rockets in eight Flights.

IX.

19 Large Sheets of Fire from the principal Parts of the Machine, compoſed of Gerbes, and from each ariſes a large Fountain.
2000 Pots de Brins.
384 Rockets in eight Flights.

X.

100 Vertical Suns, that cover the Front of the Machine.
5000 Marrons in Battery, which continue firing to the End of the Fireworks.
2800 Pots de Brins.
1 Mortar of nine Cylinders, with one large Air Ballon out of each.
480 Rockets in ten Flights.

XI.

Theſe fire together:

The grand fixed SUN on the Top of the Machine, compoſed of three Circles of Rays, whoſe Diameter of Fire is ſeventy Feet. In its Center appears

VIVAT. REX.

in bright Fire, and all its Rays terminate with Reports.

On each Side of this, and firing at the ſame Time, three Circles of Rays; their Diameter of Fire will be fifty Feet each, and their Rays likewiſe terminate with Reports.

Behind the Statue of PEACE a large *Glory*; and a figured Piece compoſed of Wheels, within the Apertures on each Side the Temple; with the Cyphers of G R before them.

Two large Trees of Fire on each Terrace forty Feet high, which terminate with Reports; and on each Pavillon a Pyramid of Fire, compoſed of Gerbes forty Feet high. Theſe terminate by Exploſions of Stars, Rains, and Serpents from fifty Pots d'Aigrettes.

576 Rockets in twelve Flights.
3200 Pots de Brins.

XII.

A grand Girandole from the Top of the Machine, conſiſting of ſix thouſand Rockets headed with Stars, Rains, and Serpents, which form one Flight.

XIII.

The Machine becomes illuminated; the allegorical Pictures, which appeared in Baſſo Relievo, are removed by Machinery, and diſcover the ſame Subjects in tranſparent Colours, and the Area before the Machine is beautifully illuminated with Variety of Deſigns. Theſe will continue burning a conſiderable Time.

An ABSTRACT *of the Number of Pieces fired on this Occaſion.*

Sky-Rockets,	
Honorary - - -	482
Caduceus - -	48
Girandole - -	48
In Flights - -	10072
Total from 4 oz. to 6 lb. wt.	10650
Air Ballons - -	87
Tourbillons - -	88
Regulated Pieces -	21
Figured Pieces - -	30
Pots d'Aigrettes -	180
Pots de Brins -	12200
Caſcades - -	21
Vertical Suns and Wheels	136
Fixed Suns - -	71
Fountains - -	160
Gerbes - -	260
Lances - -	3700
Marrons - - -	5000

WEIGHTS, &c. *of the different Pieces.*

The Honorary Rockets are of one, two, four, and ſix Pounds Weight.

The Rockets for Flights are of a quarter, and half Pound.

The Caduceus Rockets are of two Pounds.

The Girandole Rockets are of two Pounds.

The large Fountains are of ſeven Pounds.

Caſes for the great Sun, leſſer Suns, and Trees of Fire, are of three Pounds.

All the Caſes for the figured Pieces, Regulated Pieces, Caſcades, Sheets of Fire, and Royal Wheels are of one Pound and half.

All the Caſes for the other Wheels, Jets, Vertical Suns, fixed Suns, and Pyramids are of one Pound.

All the Caſes for the Gerbes are of two Pounds.

Tourbillions are of two Pounds.

Air Ballons of five three Quarters, ſix, and eight Inches Diameter.

Pots d'Aigrettes are of five Inches Diameter.

All the various Parts of this great Work are performed by the Direction of CHARLES FREDERICK Eſq; Comptroller; and Capt. THOMAS DESAGULIERS, Chief Fire Maſter of His Majeſty's Royal Laboratory.

The Fire, with its innumerable Communications, are executed by the Royal Train of Artillery, and the Signori GAETANO RUGGIERI, and GIUSEPPE SARTI of *Bologna*.

F I N I S.